

## ABSTRACT:

The invention relates to any receiver for MPSK ( $M=2^n$ ) modulation, in which an error correction device is used for correcting Tretter type frequency errors and, upstream of this device, a phase estimation device based on decisions made on the received symbols.

When the frequency error is such that, based on a certain symbol, an error is  
5 made in the decision, this error is translated by a phase jump of  $\pm \frac{\pi}{2^{n-1}}$  in the sequence of phase estimations obtained. The frequency estimation obtained is then inaccurate.

A receiver according to the invention comprises means for calculating a phase  
sequence, called initial sequence, based on decisions made on symbols, and means for  
detecting and correcting phase jumps in this initial sequence, so as to supply a phase  
10 sequence, called final sequence, to said frequency error estimation means.

Applications: Interactive data transmission system – network head-ends.

References: Fig. 5

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